

# SENATOR® 600 FS

For Use as a Seed Treatment to Protect The Seed of  
Listed Crops Against Listed Pests

**ACTIVE INGREDIENT:**

Imidacloprid ..... 48.7%

**OTHER INGREDIENTS:** .....

51.3%

**TOTAL:** .....

100.0%

Contains 5 pounds active per gallon (600 grams per liter) @ 20°C.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300.  
For Medical Emergencies Only, Call (877) 325-1840.

EPA REG. NO. 228-522

Manufactured for  
Nufarm Americas Inc.  
11901 S. Austin Avenue  
Alsip, IL 60803

 **Nufarm**  
Grow a better tomorrow



**Net Contents**  
**2.5 Gal.**  
(9.46 L)

**Nonrefillable Container**

12976000

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes or clothing.

### FIRST AID

<b>IF INHALED</b>	<ul style="list-style-type: none"><li>• Move the person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• <b>DO NOT</b> induce vomiting unless told to do so by the poison control center or doctor.</li><li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</li></ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN</b>	
No specific antidote is available. Treat the patient symptomatically.	

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves made of barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, polyethylene, polyvinylchloride (PVC)  $\geq 14$  mils or Viton  $\geq 14$  mils.
- Shoes plus socks.
- Protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### USER SAFETY RECOMMENDATIONS

**Users Should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This product is highly toxic to birds and aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters. Cover or incorporate spilled treated seeds.

Imidacloprid is highly toxic to bees. Ensure that planting equipment is functioning properly in accordance with manufacturer specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For use in commercial seed treatment facilities. Use is also permitted as an end-use seed treatment on agricultural establishments at planting, or immediately before planting, as specified in the Specific Crop Use Directions. This product is to be used in liquid or slurry treaters only.

**DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Mix thoroughly before use or use entire container at one time. All tank mixes should be pre-tested to determine physical compatibility between formulations. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. One fluid ounce of this product contains 17.7 grams imidacloprid.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**DO NOT** enter or allow worker entry into treated areas during the **restricted-entry interval (REI) of 12 hours**.

**Exception:** If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves
- Shoes plus socks
- Protective eyewear

### ROTATIONAL CROPS

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. The following plant-back intervals must be observed for listed crops.

#### ROTATIONAL PLANT-BACK INTERVALS\*

IMMEDIATE PLANT-BACK				30-DAY PLANT-BACK
Artichoke	Crambe	Oats	Soybean	Cereals, including buckwheat rice
Barley	Cucurbits	Okra	Strawberry	
Borage	Eggplant	Pepinos	Sugarbeet	
Brassica (cole)	Flax	Pepper	Sunflower	
leafy vegetables	Groundcherry	Popcorn	Tomatillo	
Bulb vegetables	Leafy petiole vegetables	Potato	Tomato	
Canola	Leafy vegetables	Rapeseed	Triticale	
Cilantro	Legume vegetables	Rye	Root and Tuber	
Corn, Field	(succulent or dried,	Safflower	vegetables	
Corn, Sweet	including Soybean)	Sorghum	Watercress	
Cotton	Millet		Wheat	
Cranberry	Mustard seed			

\* Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

\* For all other crops not listed on an imidacloprid label, or for crops for which no tolerance for the active ingredient has been established, a 12-month plant-back interval must be observed.

**NOTIFICATION** of the crop rotational restriction must be conveyed to the grower by appropriate seed tag labeling or bag printing on all seed units.

**IMPORTANT:** The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately dyed with a suitable color to prevent its accidental use as food for man or feed for animals. Refer to 21 CFR, Part 2.25. Any dye or colorant added to treated seed must be cleared for use under 40 CFR, Part 180.1001. Federal regulations have established official tolerances for certain pesticide residues. In order that residues on food and forage crops will not exceed established tolerances, use only at specified rates.

## USE RESTRICTIONS

- **DO NOT** use as a planter (hopper) box treatment.
- **DO NOT** use treated seed for feed, food, or oil purposes.
- Store treated seed away from feeds and foodstuffs.
- **DO NOT** allow children, pets, or livestock to have access to treated seed.
- Treated seed must not be used for or mixed with food or animal feed or processed for oil. Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act.
- The maximum application rate for imidacloprid (including seed treatments, foliar applications, soil applications) is 0.5 lbs per acre per calendar year. **DO NOT** apply more than 0.5 lbs ai imidacloprid per acre per calendar year.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Exposed treated seed may be hazardous to birds. Cover or incorporate spilled treated seed. Excess or leftover seed may be double-sown around the headland or buried away from bodies of water in accordance with local requirements.

## SEED BAG LABELING REQUIREMENTS

Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act. The user of this product is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEEDS BE LABELED WITH THE FOLLOWING STATEMENTS:

- This seed has been treated with SENATOR 600 FS (imidacloprid)
- **DO NOT** use for feed, food, or oil purpose.

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON BAGS CONTAINING SEEDS TREATED WITH SENATOR 600 FS (imidacloprid)

- Pollinator Precautions: Imidacloprid is highly toxic to bees. Ensure that planting equipment is functioning properly in accordance with manufacturer specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants, shoes and socks, and chemical resistant gloves made out of: barrier laminate, butyl rubber  $\geq 14$  mils, nitrile rubber  $\geq 14$  mils, neoprene rubber  $\geq 14$  mils, natural rubber  $\geq 14$  mils, polyethylene, polyvinylchloride (PVC)  $\geq 14$  mils, or Viton  $\geq 14$  mils, when handling treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Exposed treated seed may be hazardous to birds. Cover or incorporate spilled treated seeds. Excess or leftover seed may be double-sown around the headland or buried away from bodies of water in accordance with local requirements.
- Dispose of seed packaging in accordance with local requirements.
- **DO NOT** contaminate water bodies when disposing of planting equipment wash water.
- **DO NOT** allow children, pets, or livestock to have access to treated seed.
- In the event of a crop failure or harvest of a crop grown from SENATOR 600 FS treated seed, the field may be replanted immediately to artichoke, barley, borage, Brassica (cole) leafy vegetables, bulb vegetables, canola, cilantro, corn (field or sweet), cotton, cranberry, crambe, cucurbits, eggplant, flax, groundcherry, leafy petiole vegetables, leafy vegetables, legume vegetables (succulent or dried including soybean), millet, mustard seed, oats, okra, pepinos, pepper, popcorn, potato, rapeseed, rye, safflower, sorghum, soybean, strawberry, sugarbeets, sunflower, tomatillo, tomato, triticale, root and tuber vegetables, watercress, and wheat. For cereals including buckwheat, and rice; the minimum plant-back interval is 30 days from the date SENATOR 600 FS treated seed was planted. Cover crops for soil building or erosion control may be planted at any time; but do not graze or harvest for food or feed. For all other crops not listed on an imidacloprid label, or for crops for which no imidacloprid, tolerance for the active ingredient has been established, a 12-month plant-back interval must be observed.
- The maximum application rate (including seed treatment, foliar application, and soil application) per acre per calendar year for imidacloprid is 0.5 lbs. Do not apply more than 0.5 lbs a.i. imidacloprid/ acre per calendar year.
- This seed has been treated with   X   lbs imidacloprid per   \_\_\_   lbs of seed [ or   X   mg imidacloprid per seed].
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticides remain in the ethanol by-products that are used in agronomic practice.

## SPECIFIC CROP USE DIRECTIONS

<b>CARROT:</b>	
To provide early season protection of seedlings against injury by listed pests, apply as a commercial seed treatment.	
<b>For Use In Commercial Seed Treatment Facilities</b>	
<b>Target Pest:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Seed corn maggot Wireworm	6.4

<b>CORN:</b>				
For the protection of corn plants from the corn insect pests listed below, apply as a seed treatment at the specified rates.				
<b>For Use In Commercial Seed Treatment Facilities</b>				
<b>Target Pests:</b>	<b>Fluid Ounces of Product /</b>			<b>MG AI / SEED</b>
	<b>100 lb seed*</b>	<b>1000 seeds</b>	<b>80,000 seed count</b>	
Corn root worm (including Northern, Western, Southern and Mexican) Flea beetle Chinch bug Southern green stinkbug White grub Seed corn maggot Thrips Wireworm Corn leaf aphid Imported fire ant Southern corn leaf beetle Billbug <sup>2</sup> Grape colaspis <sup>2</sup> Black cutworm <sup>3</sup>	13.5	0.076	6.05	1.34
Flea beetle Chinch bug Seed corn maggot Thrips Wireworm Corn leaf aphid Imported fire ant Grape colaspis <sup>2</sup> White grub	6.0	0.034	2.69	0.60
Seed corn maggot (seed protection only) Wireworm (seed protection only) Flea beetle (through 1 leaf stage) Imported fire ant White grub <sup>4</sup>	1.6	0.009	0.72	0.16

This product contains 17,700 mg imidacloprid (AI) / fluid ounce.

\*based on a standard number of 1786 seeds / lb (100,000 seeds / 56 lb bu)

<sup>1</sup> In areas of heavy to severe corn rootworm populations, protection will not be adequate. Use only in areas of light to moderate corn rootworm populations. Consult your State Agricultural Extension Service on levels of corn rootworm populations.

<sup>2</sup> Reduces early season feeding damage.

<sup>3</sup> Will reduce feeding damage caused by leaf feeding black cutworms that are 1/2 inch or less in length.

<sup>4</sup> Reduces feeding damage during emergence and seedling stages.

**IMPORTANT:** To maintain mg ai / seed there is no need to adjust the rate if fluid ounces per number of seeds (i.e. 1,000, 80,000) is used as the rate.

To maintain mg ai / seed when the rate is used in fluid ounces / 100 lb, adjust the rate in proportion to the actual seeds / lb compared to the standard number of seeds / lb for that crop. For example, if there are 1600 corn seeds / lb, the targeted rate is 0.16 mg ai / seed and the non-adjusted rate in fl. oz. / 100 lb of seed is 1.6 use  $1,600 \div 1,786 \times 1.6 = 1.43$  fl. oz. / 100 lbs of seed.

**For End Use Application At Agricultural Establishments**

Apply using an HCBT or an Eight-Bag Batch Treater. Shake this product thoroughly before use. Dilute this product with water and/or an approved Nufarm fungicide mixture. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50 pound bag of seed. Treat one-half of slurry mix. Allow mixing until seed is thoroughly covered. Apply 0.75 ounce of dry TALC per 50 pound bag of seed following the product application and allow it to distribute evenly on the seed.

**Sweet Corn**

**For Use In Commercial Seed Treatment Facilities**

<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Flea beetle Early season corn leaf aphid Seed corn maggot Wireworm	6.4
Imported fire ant Early season corn leaf aphid Seed corn maggot Wireworm	3.2 – 6.4
Imported fire ant Seed corn maggot (seed protection) Wireworm (seed protection)	1.6 – 3.2
Wireworm (seed protection)	0.8 – 1.6

Adjust the final slurry rate to apply 16 to 20 fluid ounces of diluted solution per 100 lb of seed with commercial equipment. When targeting pests that specify a low - high use rate range, use the high rate on seed planted in areas with historically high pest pressure.

**Popcorn**

**For Use In Commercial Seed Treatment Facilities**

<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Flea beetles	6.4

**COTTON** (Delinted Seed Only):

To provide protection of seedlings against injury by listed pests, apply as a seed treatment at the specified rates.

**For Use In Commercial Seed Treatment Facilities**

<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>	<b>MG AI/ SEED</b>
Thrips Aphids	12.8	0.375

**For End Use Application At Agricultural Establishments**

Apply using an HCBT or an 8-Bag Batch Treater. Shake this product thoroughly before use. This product may be diluted with water or an approved Nufarm fungicide mixture, such as SEBRING 318 FS, for extended disease protection. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50-pound bag of seed. Treat one-half of seed with one-half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered.

<b>Target Pests:</b>	<b>Fluid Ounces Product / 50 lb bag</b>
Thrips Aphids	6.4
<b>USE RESTRICTIONS:</b> Regardless of the type of application (seed treatment, soil or foliar): <b>DO NOT</b> apply more than a total of 0.5 pound of imidacloprid per acre per calendar year.	

**CANOLA SEED, RAPESEED, MUSTARD SEED, FLAX SEED, CRAMBE SEED, BORAGE SEED, SUNFLOWER SEED, SAFFLOWER SEED:**  
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.

**For Use In Commercial Seed Treatment Facilities**

<b>Canola, rapeseed, mustard seed:</b>	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Aphids Flea beetles Wireworms	10.24 – 25.6
In areas where flea beetles and foliar insects are in high numbers, use the higher application rate within the specified range. Consult your local agricultural office for pest patterns, history, and forecasts to assist in determining the appropriate rate for your region.	
<b>For suppression of:</b> 2 <sup>nd</sup> Generation Lygus bugs, including <i>Lygus</i> spp. Seedpod weevil larvae including <i>Ceutorhynchus assimilis</i>	15.36 – 25.6
For suppression of Lygus bugs and Seedpod weevil larvae use rate use the high rate on seed planted in areas with historically high pest pressure.	

<b>Flax*, crambe*, and borage*:</b>	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Wireworms Seed corn maggots Flea beetles	25.6
<b>Safflower*:</b>	
<b>Target Pests:</b>	<b>MG AI/ SEED</b>
Wireworms	0.25 – 0.50 (17,700 mg imidacloprid / fluid ounce product) Use the high rate on seed planted in areas with historically high wireworm pressure.
<b>Sunflower*:</b>	
<b>Target Pests:</b>	<b>MG AI/ SEED</b>
Wireworms Seed corn maggots Flea beetles	0.25 – 0.50 (17,700 g imidacloprid / fluid ounce product) Use the high rate on seed planted in areas with historically high pest pressure.

**For End Use Application At Agricultural Establishments**

Apply using an HCBT or a Batch Treater. Shake this product thoroughly before use. This product may be diluted with an approved Nufarm fungicide mixture for extended disease protection. Treat one-half of seed with one-half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered.

<b>Canola, rapeseed, mustard seed:</b>	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 50 lb bag</b>
Aphids Flea beetles Wireworms	5.1 – 12.8 Use the high rate on seed planted in areas with historically high pest pressure.

<b>Flax*, sunflower*, crambe*, and borage*:</b>	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Wireworms Seed corn maggots Flea beetles	12.8
<b>Safflower*:</b>	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Wireworms	12.8
<b>USE RESTRICTIONS:</b> Rape greens grown and harvested from this product's treated seed must not be used for human and feed consumption. Rapeseed grown and harvested from this product's treated seed is only for industrial uses and cannot be used for edible oil or any other human/ feed consumption. *Seed treated in California must be destined for planting in states other than California and is not to be planted in California.	

<b>SEED AND POD VEGETABLES (including):</b>	
Adzuki Bean, Asparagus Bean, Broad Bean (Succulent or Dry), Catjang Bean, Chinese Longbean, Field Bean, Guar Bean, Jackbean, Kidney Bean, Labtab Bean, Lima Bean (Succulent or Dry), Moth Bean (Succulent or Dry), Mung Bean, Navy Bean, Pinto Bean, Rice Bean, Runner Bean, Snap Bean, Sword Bean, Tepary Bean, Urd Bean, Wax Bean, Yardlong Bean, Blackeyed Pea (Succulent or Dry), Chickpea, Cowpea (Succulent or Dry), Crowder Pea, Dwarf Pea, Edible-Pod Pea, English Pea, Field Pea, Garden Pea, Green Pea, Pigeon Pea (Succulent or Dry), Snow Pea, Southern Pea (Succulent or Dry), Sugar Snap Pea, Grain Lupin, Sweet Lupin, White Lupin, White Sweet Lupin, Lentil:	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.	
<b>For Use In Commercial Seed Treatment Facilities</b>	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Wireworm Bean leaf beetle Fire ant Aphids	1.6 -3.2 Use the high rate on seed planted in areas with historically high pest pressure.
<b>USE RESTRICTIONS:</b> Seed-and-pod vegetable seed treated in California must be destined for planting in states other than California and is not to be planted in California.	

<b>SORGHUM:</b>	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.	
<b>For Use In Commercial Seed Treatment Facilities</b>	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Aphids (including Corn leaf, English grain, Greenbug, and Yellow sugar cane) Chinch bugs Fire ants Wireworms	6.4
<b>For End Use Application At Agricultural Establishments</b>	
Apply using an HCBT or an 8-Bag Batch Treater. Shake this product thoroughly before use. Dilute this product with water. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50-pound bag of seed. Treat one-half of seed with one-half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered. Apply 0.75 ounce of dry TALC per 50-pound bag of seed following the product application and allow it to distribute evenly on the seed.	



<b>Target Pests:</b> Aphids (including Corn leaf, English grain, Greenbug, and Yellow sugar cane) Chinch bugs Fire ants Wireworms	<b>Fluid Ounces Product / 50 lb seed</b>  3.2
<b>USE RESTRICTIONS:</b> <b>DO NOT</b> graze or feed livestock on treated areas for 45 days after planting.	

<b>SOYBEAN:</b>				
To provide early season protection against injury by listed pests and to suppress the spread of certain viruses caused by insect vectors, apply as a seed treatment at the specified rates.				
<b>For Use In Commercial Seed Treatment Facilities</b>				
Use higher rates within the specified range to provide increased length of protection and for heavy insect pressure. This product can be used as an over-treatment.				
<b>Target Pests:</b>	<b>PRODUCT FLUID OUNCES /</b>			<b>MG AI/ SEED</b>
Seed corn maggot Soybean aphids Bean leaf beetles (overwintering)	<b>100 lb seed*</b>	<b>1000 seeds</b>	<b>140,000 seed count</b>	
	1.6 – 3.2	0.0053 – 0.0107	0.75 – 1.50	0.095 – 0.190
This product contains 17,700 mg imidacloprid / fluid ounce. *based on a standard number of 2,800 seeds / lb				
<b>IMPORTANT:</b> To maintain mg ai / seed, there is no need to adjust the rate if fluid ounces per number of seeds (i.e. 1,000, 140,000) is used as the rate. To maintain mg ai / seed when the rate used is in fluid ounces / 100 lb, adjust the rate in proportion to the actual seeds / lb compared to the standard number of seed / lb for that crop. For example, if there are 2,500 soybean seeds / lb, the targeted rate is 0.095 mg ai / seed, and the non-adjusted rate in fl. oz. 100 lb of seed is 1.6; use $2,500 \div 2,800 \times 1.6 = 1.43$ fl. oz. / 100 lb of seed.				
Use the high rate on seed planted in areas with historically high pest pressure.				
<b>USE RESTRICTIONS:</b> <b>DO NOT</b> graze or feed livestock on soybean forage or hay.				

<b>SUGAR BEETS:</b>	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.	
<b>For Use In Commercial Seed Treatment Facilities</b>	
<b>Target Pests:</b> Whitefly Aphids / Leafhoppers (including vectors that may spread Curly top and Yellow mosaic virus) Root aphids Thrips Wireworms	<b>Use Rate:</b> 2.4 to 5.0 ounces of this product in or on a unit of pelleted sugar beet seed with a weight ratio of 2:1 pelleting mixture to raw seed (seed count 100,000 seed - approximately 1 kilogram by weight). Apply in a film coat directly to raw seed (100,000 seed or approximately 1 kilogram by weight) at a rate of 2.4 fluid ounces per unit of seed. If rates exceed 2.4 fluid ounces per unit, seed must be pelleted. Use the high rate on seed planted in areas with historically high pest pressure.

<b>Wheat, Barley, Oats, Rye, Triticale:</b>	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.	
<b>For Use In Commercial Seed Treatment Facilities</b>	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Aphids (including Bird cherry-oat, English grain, Greenburg, and Russian wheat aphid) Hessian fly	0.8 – 2.4
<b>For Suppression of:</b> Wireworm	0.13 – 0.26
Grasshopper	1.2 – 2.4
Use the higher rate within the specified range to provide increased length of protection and to reduce potential spread of Barley yellow dwarf virus due to aphid vectors.	
To reduce early season damage caused by grasshopper, this product's treated seed may be planted as a 50 to 60 foot border around the edges of the field. Consult your local university extension entomologist for details regarding grasshopper control in your area. For maximum effectiveness, seed should be treated uniformly.	
<b>For End Use Application At Agricultural Establishments</b>	
Apply using a Total Slurry Treater (TST), Farmer Applied Seed Treater (F.A.S.T.), Farmer Air Pressure System (FAP) or other on-farm liquid or slurry seed treating equipment to deliver accurate rates of this product to achieve optimum product performance. Combine this product with an approved Nufarm fungicide product for seed and seedling protection against fungal pathogens. Dilution with water may be necessary depending on fungicide formulation used. This product may also be applied on-farm as an over-treatment to seed pretreated with a fungicide. In this case, dilution is necessary.	
<b>Target Pests:</b>	<b>Fluid Ounces Product / 100 lb seed</b>
Aphids (including Bird cherry-oat, English grain, Greenburg, and Russian wheat aphid) Hessian fly	0.8 – 2.4
<b>For Suppression of:</b> Wireworm	0.13 – 0.26
Grasshopper	1.2 – 2.4
Use the high rate on seed planted in areas with historically high pest pressure.	
<b>USE RESTRICTIONS:</b>	
<b>DO NOT</b> graze or feed livestock on treated areas for 45 days after planting.	

<b>ADDITIONAL USES:</b>
<b>Stored Seed Protection:</b> When applied according to use directions and at labeled rates equal to or above 1.0 fluid ounce per 100 lb of seed, this product will provide protection to seed against injury from the following insects: Indian Meal Moth ( <i>Plodia interpunctella</i> ), Rice Weevil ( <i>Sitophilus oryzae</i> ), Red Flour Beetle ( <i>Tribolium castaneum</i> ), and Lesser Grain Borer ( <i>Rhizopertha dominica</i> ). It is recommended that seed with existing populations of stored grain pests be fumigated prior to treating and bagging seed.

# STORAGE AND DISPOSAL

**DO NOT** contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool place. **DO NOT** store in direct sunlight. Protect from freezing temperatures.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

## **CONTAINER HANDLING:**

### **Nonrefillable Containers 5 Gallons or Less**

**Nonrefillable container. DO NOT** reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration.

### **Nonrefillable containers larger than 5 gallons**

**Nonrefillable container. DO NOT** reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

**Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure-rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

### **Refillable containers larger than 5 gallons**

**Refillable container.** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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